

## **REMARKS**

### **Amendments to the Figures**

Figures 3A and 3B have been amended to correct obvious clerical errors.

### **Amendments to the Specification**

The Specification has been amended at page 8, first paragraph, to correct an obvious clerical error. Support is found in Figures 3C and 3D.

The Specification has been amended to eliminate embedded hyperlinks. The amended hyperlink on page 26, fourth full paragraph, has been disabled.

A "Brief Description of the Figures" section has been added to the Specification. Support for each figure description is as follows:

Figure 1: Support is found in the third full paragraph of page 2 through the second full paragraph of page 3 of the Specification.

Figure 2: Support is found in the second through fourth full paragraphs of page 14 of the Specification.

Figure 3: Support is found in the first full paragraph of page 3, fourth through last full paragraphs of page 10 of the Specification.

Figure 4: Support is found in the figure. Note that the point of the arrangements in Figure 4 is to bias towards insertion of the DNA of interest in the initial transformation, as opposed to simply integrating the short left-hand transposon. It will be noted that having 3' distal ends is purely for illustration, given the requirement for "more than one."

Figure 5: Support is found in the first and third full paragraphs of page 25 of the Specification.

Figure 6: Support is found in the fourth full paragraph of page 25 of the Specification.

Figure 7: Support is found in the third full paragraph of page 26 of the Specification.

Figure 8: Support is found in the first full paragraph of page 28 of the Specification.

Figure 9: Support is found in the third full paragraph of page 28 of the Specification.

Figure 10: Support is found in the third full paragraph of page 29 of the Specification.

No new matter has been added.

### **Amendments to the Claims**

Claim 1 has been amended to clarify that excision by a transposase or transposases of said pairs, *in situ*, is effective to be able to leave said DNA integrated into the host genome without the presence of said repeats flanking said DNA insertion. Support is found, e.g., in the seventh full paragraph of page 5 of the Specification.

Claims 7 and 8 have been amended to specify that the inverted repeats are homologous to each other. Support is found, e.g., in the seventh paragraph of page 6 and first paragraph of page 7 of the Specification.

Non elected claims 14-18 have been cancelled without prejudice.

Claim 24 has been amended to specify that the transposon being excised is the said repeats of claim 1. Support is found, e.g., in the fourth full paragraph of page 16 of the Specification.

Claim 27 has been amended to specify a non-human transformant. Support is found, e.g., in the third paragraph of page 16 of the Specification.

New claim 32 has been added to specify that DNA of interest is integrated into the host without the presence of any transposon DNA. Support is found, e.g., in the last full sentence of page 16.

No new matter has been added.

### **Objections to the Specification**

The disclosure has been objected to because it contains an embedded hyperlink and/or other form of browser-executable code.

The Specification has been amended to disable the embedded hyperlink on page 26, fourth full paragraph.

The disclosure is further objected to because it does not contain, as a separate section, a "Brief Description of the Drawings."

A "Brief Description of the Figures" section has been added to the Specification.

### **The Rejection under 35 USC 101**

Claim 27 has been rejected under 35 U.S.C. 101 because, allegedly, the claimed invention is directed to non-statutory subject matter.

The Office Action states:

Applicant claims a transformant organism, which the specification indicates can be a mammal, comprising a DNA integrated into the genome by use of the recited transposons. Since the claims encompass a mammal (including a human), the claims read on a transformant human being, which is non-statutory subject matter.

Claim 27 has been amended to specify a non-human transformant. The claim is therefore directed to statutory subject matter.

### **The Rejection under 35 USC 112, Second Paragraph**

Claims 1-13 and 19-31 have been rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Office Action states:

Claim 1 (and dependent claims) are vague in the recitation of "transposon **derived** (emphasis added) repeats **derived from** (emphasis added) said transposable element." Use of the terms "derived" or "derived from" renders the claims vague in that it is unclear what step(s) are involved in the derivation. It is unclear how closely related to the starting materials the transposon-derived repeats are to the starting repeat sequences.

Claim 1 has been amended by deleting the recitation of the phrase "flanking transposon-derived repeats derived from said transposable element" and clarifying that excision by a transposase or transposases of said pairs, *in situ*, is effective to be able to leave said DNA integrated into the host genome without the presence of said repeats flanking said DNA insertion.

Dependent claims 2-13 and 19-31 were rejected as indefinite because of their dependency on rejected claim 1; however, the amendment to claim 1 should obviate this rejection.

The Office Action further states:

Claim 7 is vague in the recitation of the phrase "wherein the inverted repeats are homologous". It is unclear what the elements are homologous to, i.e. are they homologous to each other to some other sequences?

Claim 8 is vague in the recitation of "pairs of homologous inverted repeats". It is unclear what the elements are homologous to, i.e. are they homologous to each other to some other sequences?

Claims 7 and 8 have been amended to specify that the inverted repeats are homologous to each other.

The Office Action further states:

Claim 24 (and dependent claims) are vague in the recitation of "providing conditions suitable to excise **a transposon** (emphasis added) from the genome". It is unclear what transposon is being excised, i.e. the transposon of claim 1 or some other transposon?

Claim 24 has been amended to specify that the transposon being excised is the inverted repeats of claim 1.

## **Conclusion**

It is submitted that this case is in condition for allowance, and passage to issuance is respectfully requested. It is believed a one-month Extension of Time is required, and a Request for Extension of Time together with the appropriate fee is submitted with this Response. If this is incorrect, please deduct the correct fee, and any fee required for any further extension of time needed, from deposit account 07-1969.

Respectfully submitted,

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